WHAT IS CLAIMED IS:

1. A method of adding one or more telomeric repeats to DNA which codes for a product which changes the level of taxol production wherein the method comprises introducing the DNA into a *Pestalotiopsis* cell.

2. A method of generating extrachromosomal DNA comprising introducing DNA into a *Pestalotiopsis* cell wherein the DNA codes for a product which changes the level of taxol production.

3. A method of generating a replicable nucleic acid element comprising introducing DNA into a *Pestalotiopsis* cell wherein the DNA codes for a product which changes the level of taxol production.

4. A method of transformation wherein the method comprises:

a) introducing DNA which codes for a product which changes the level of taxol production into a *Pestalotiopsis* cell;

b) permitting one or more telomeric repeats to be added to the DNA to produce extrachromosomal DNA;

c) extracting the extrachromosomal DNA from the transformed *Pestalotiopsis* cell; and

d) introducing the extracted extrachromosomal DNA into a second cell.

5. The method of claim 1, 2, 3 or 4 wherein the DNA has at least 80% sequence similarity to *Pestalotiopsis* DNA.

6. The method of claim 1, 2, 3 or 4 wherein the DNA is not *Pestalotiopsis* DNA.

7. The method of claims 1, 2, 3 and 4 wherein the DNA codes for enzymes selected from the group consisting of taxadiene synthase, taxadiene-5-hydroxylase

and acetyl-coenzyme A.

8. The method of claim 1, 2 or 3 wherein the method further comprises selecting the cell transformed by the introduction of the DNA.

9. The method of claim 4 wherein the second cell is a eukaryotic cell or a prokaryotic cell.

10. The method of claim 4 wherein the second cell is a *Pestalotiopsis* cell.

11. An artificial chromosome comprising a *Pestalotiopsis* telomerase or *Pestalotiopsis* telomerase subunit and DNA which codes for an enzyme selected from the group consisting of taxadiene synthase, taxadiene-5-hydroxylase and acetyl-coenzyme A.